

Health Priority: Overweight, Obesity and Lack of Physical Activity
Objective 4: Overweight and Obesity

Long-term (2010) Subcommittee Outcome Objective (4): By 2010, reduce the proportion of children who are overweight* from 11.4% to 9.4%, the proportion of adolescents who are overweight* from 10% to 8% and the proportion of adults who are obese** from 20% to 15%.

School-Based Outcomes

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation/Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Parent Teacher Associations/Parent Teacher Organizations Parents, children, and adolescents Teachers, principals, school administration Department of Public Instruction Institutions of Higher Education School food service managers Department of Health and Family Services, Division of Public Health Local health departments Tribes Wisconsin Association of Health, Physical	Education on the feeding relationship/ division of responsibility including using food as a reward or incentive. Conduct focus groups. Grassroots advocacy for policy change in schools. Provide schools with best practices curriculum on Food Guide Pyramid and Dietary Guidelines for Americans. Statewide efforts to implement policy changes (see objective #1). Advocacy with universities and technical colleges to enhance nutrition education in curriculum.	Parents, children and adolescents Parent Teacher Associations/Parent Teacher Organizations Schools School food service managers Teachers	<u>Level 1 objective</u> Increase the proportion of schools that promote the Dietary Guidelines and Food Guide Pyramid through policy and education. <u>Level 2 objectives</u> <ul style="list-style-type: none"> ▪ Increase the proportion of children and adolescents whose intake of meals and snacks at school contributes proportionally to good overall dietary quality (19-15). ▪ Decrease the percentage of schools with exclusive contracts with soda companies. ▪ Increase the percentage of schools that require nutrition education in curriculum. ▪ Increase the percentage of colleges and universities that include nutrition education in curriculum for teachers. ▪ Increase children's knowledge of the Food Guide Pyramid and the Dietary Guidelines for Americans. ▪ Increase the percentage of children and adolescents with knowledge of caloric intake and energy expenditure. 	<u>Level 2 continued</u> Decrease the percentage of schools that use food as a reward or incentive. <u>Level 3 objectives</u> By 2008, increase the percentage of children and adolescents who follow the Dietary Guidelines for Americans and the Food Guide Pyramid as demonstrated by: <ul style="list-style-type: none"> • Increase in low-fat dairy intake. • Decrease in total fat intake (19-9). • Increase in fruit and vegetable intake (19-5,6). 	By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4% ., adolescents who are overweight from 10.0% to 8.0%, and the proportion of adults who are obese from 20% to 15%.

Education, Recreation, and Dance					
Statewide leadership time and effort					
Participation of Department of Public Instruction in promoting policy change					
Local volunteer time and or staff time for advocacy					
Department of Public Instruction's best practices: resources for teachers' classroom use					

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Worksite/Senior Site Based Outcomes

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation/ Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Partners Unions, employers, employees Government: state, regional, and local City councils, county boards Insurance Companies Business Associations Media and Marketing Health Professionals Organizations Wisconsin Affiliates of the American Heart Association, American Dietetics Association, American Dietetic Association, American Cancer Society Senior Centers, Assisted Living Centers, Nursing Homes Wisconsin Association of Health, Physical Education, Recreation, and Dance Malls and shopping centers School Administration Hotels Community Leaders	Conduct surveys/focus groups with employees. Educate work sites regarding the cost-benefits of health promotion. Form work site wellness committees. Provide work sites with model policies and resources.	Working adults and older adults who are not working. Employers, employees. Work sites Senior sites	<u>Level 1 Objective</u> Increase the proportion of worksites that promote the Dietary Guidelines for Americans and the Food Guide Pyramid through policy and programs. <u>Level 2 Objectives</u> Increase the percentage of worksites that offer nutrition and/or weight management programs or counseling (19-16). Increase the percentage of worksites that offer healthier food options on site. Increase incentives for worksites to provide health promotion benefits. Increase the percentage of senior sites that offer education related to weight management counseling.	<u>Level 3 Objective</u> By 2008, increase the percentage of adults who follow the Dietary Guidelines for Americans and the Food Guide Pyramid as demonstrated by: <ul style="list-style-type: none"> ▪ Increase in low-fat dairy intake. ▪ Decrease in total fat intake (19-9). ▪ Increase in fruit and vegetable intake (19-5,6). 	By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4%, adolescents who are overweight from 10.0% to 8.0%, and the proportion of adults who are obese from 20% to 15%.

Local health departments Tribes Work site foodservice managers Occupational health nurses Human Resource Associations Weight management organizations Leadership at state level to coordinate outreach/education/ resources (see Objective 1). Materials/resources for work sites. Time/resources for food service to learn and plan for policy changes. Resources to support programs and food service.					
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Environmental Outcomes

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation/ Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Restaurant associations Major fast food chains Vending machine operators Other food industry partners Wisconsin Dietetic Association Wisconsin Association of Health, Physical Education, Recreation, and Dance Department of Health and Family Services, Division of Public Health Local health departments Regional and local health promotion partners (e.g., hospitals, clinics, HMO's) Staff and volunteer time for advocacy. Resources to provide training. Time of foodservice managers and/or owners to learn and plan policy changes. Time to develop nutrition related	Statewide advocacy with foodservice industry. Local grassroots advocacy in local foodservice. Education of foodservice providers. Provide menu analysis service to facilitate nutrition information for consumers.		Increase the percentage of food environments that offer low-fat/fat-free milk. Increase the percentage of food environments that offer nutrition information for foods served Increase the percentage of food environments that offer a variety of fruits and vegetables Increase incentives and subsidies to vendors to make and/or offer healthier food options. Increase the availability of healthier food options at food pantries. Increase access to and participation in programs that foster a healthy diet (e.g., WIC, Farmers Markets, Community Gardens, Food Co-ops, Food and Nutrition Program/EFNEP).	Increase the availability of and access to healthier food options at away from home eating sites (e.g., fast food, restaurants, and vending machines). * Definitions: • Fast food includes self-serve restaurants, carryout places, cafeterias and meals on wheels • Restaurants are those with waiter or waitress service <i>[Note: (*) as defined by the Continuing Survey of Food Intake.]</i>	By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4%, adolescents who are overweight from 10.0% to 8.0%, and the proportion of adults who are obese from 20% to 15%.

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Health Care System Outcomes

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation/ Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Weight loss programs Healthcare providers Insurance companies Healthcare professional organizations Local health departments Tribes Department of Health and Family Services, Division of Public Health Wisconsin Affiliates of the American Cancer Society, American Heart Association, American Dietetics Association Wisconsin Association of Health, Physical Education, Recreation, and Dance Governor's Council on Physical Fitness and Health American College of Sports Medicine	<p>Training for healthcare providers on motivational interviewing, breastfeeding, early feeding relationship and division of responsibility (Satter) include diversity competence.</p> <p>Integrate information about nutrition, weight management and motivational counseling into curriculum for healthcare professionals.</p> <p>Advocacy and policy development for insurance coverage.</p> <p>Develop a network of nutrition professionals (hire or through referral).</p> <p>Develop and maintain family-based behavior change programs for overweight children.</p> <p>Disseminate information regarding overweight/obesity prevention and nutrition professionals (e.g., media, community campaign, resource guide).</p>		<p>Increase healthcare provider knowledge, awareness and skills for motivational interviewing.</p> <p>Increase the percentage of healthcare institutions with formalized referral linkages for nutrition and weight counseling.</p> <p>Increase the proportion of insurance plans that cover nutrition and weight counseling.</p>	<p>Increase the proportion of health care providers who counsel and refer on nutrition and weight.</p> <p>Increase the proportion of physicians and other health care providers who utilize the Clinical Guidelines... for Adults.</p> <p>Increase the proportion of physicians and other health care providers who utilize the Obesity Evaluation and Treatment Recommendations for children.</p>	<p>By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4%, adolescents who are overweight from 10.0% to 8.0%, and the proportion of adults who are obese from 20% to 15%.</p>

American Council on Exercise					
Medical Schools					
Institutions of Higher Education					
State Medical Society					
Employers					
Funding					
Staff time					

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Breastfeeding/Feeding Relationship Outcomes

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation/Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Staff time Funding Hospital capacity Work site capacity Capacity to monitor Key partners: <ul style="list-style-type: none"> ▪ Healthcare professionals ▪ Local community members ▪ Parents ▪ Families ▪ Employers ▪ Childcare providers ▪ Legislature ▪ Hospitals ▪ Healthcare institutions ▪ Breastfeeding support groups ▪ Department of Health and Family Services, Division of Public Health ▪ Local health departments ▪ Tribes 	Train healthcare professionals on the basics of lactation, breastfeeding counseling, and lactation management during coursework and continuing education. Form coalition or taskforce to promote and support breast-feeding as the norm for infant feeding and appropriate infant feeding practices (feeding relationship). Establish hospital and maternity center practices that promote breastfeeding such as the “Ten Steps to Successful Breastfeeding.” Establish work site, family, and community programs and policies that enable breastfeeding continuation when women return to work. Monitor incidence and duration trends, including minority and ethnic groups (data collection).	Healthcare professionals Local community member Healthcare professionals Parents and families Employees Childcare Providers Community members Legislature Employers Employees and families	Increase the percentage of women who initiate breastfeeding in the early post-partum period. Increase the number of hospitals that have adopted the 10 steps to successful breastfeeding. Increase the number of worksites that have policies that support breastfeeding employees. Increase the number of health care providers that receive training on the parent-child feeding relationship and the division of responsibility in feeding.	By 2008, increase the percentage of infants who are breastfed for 12 months or longer to 25%. Increase the percentage of new parents who receive information on the feeding relationship, feeding cues, and the division of responsibility in feeding	By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4%, adolescents who are overweight from 10.0% to 8.0%, and the proportion of adults who are obese from 20% to 15%.

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Long-term (2010) Subcommittee Outcome Objective:

By 2010, reduce the proportion of children who are overweight from 11.4% to 9.4%, the proportion of adolescents who are overweight from 10% to 8%, and the proportion of adults who are obese from 20% to 15%.

Wisconsin Baseline	Wisconsin Sources and Year
11.4% of children ≥ 2 years and < 5 years are overweight, based on the 2000 CDC growth chart percentiles for BMI-for-age for children 2 years and older.	2000 Wisconsin Pediatric Nutrition Surveillance Report, Centers for Disease Control and Prevention. (2001).
10% of adolescents aged 12 to 19 years were overweight, based on the 2000 CDC growth chart percentiles for BMI-for-age for children 2 years and older.	2001 Wisconsin Youth Risk Behavior Survey. (2002).
20 % of adults were obese.	2000 Wisconsin Behavioral Risk Factor Survey. (2001).

Federal/National Baseline	Federal/National Sources and Year
23% of adults aged 20 years and older were identified as obese - defined as a body mass index (BMI) of 30 or more.	National Health and Nutrition Examination Survey (NHANES), Centers for Disease Control and Prevention, National Center for Health Statistics. 1988-1994 (age adjusted to the year 2000 standard population)
11% of children age 6-19 years were overweight or obese, defined as at or above the gender-and age-specific 95 th percentile of body mass index (BMI) based on the revised CDC Growth Charts for the United States.	National Health and Nutrition Examination Survey (NHANES), Centers for Disease Control and Prevention, National Center for Health Statistics. 1988-1994.
12.9 percent of children ≥ 2 years and < 5 years are overweight, based on 2000 CDC growth chart percentiles for body mass index (BMI) for age for children 2 years and older.	2000 Pediatric Nutrition Surveillance Report, Centers for Disease Control and Prevention. (2001).

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
19 - Nutrition and Overweight	Promote health and reduce chronic disease associated with diet and weight.	19-2	Reduce the proportion of adults who are obese.
19 - Nutrition and Overweight	Promote health and reduce chronic disease associated with diet and weight.	19-3	Reduce the proportion of children and adolescents who are overweight or obese.

Definitions	
Term	Definition
Overweight	At or above the gender-and age-specific 95 th percentile of body mass index (BMI) based on the revised CDC Growth Charts for the United States (U.S. Department of Health and Human Services, 2000)
Obese	A body mass index (BMI) of 30 or more.
Diversity Competence	Refers to programs and services that are designed with the acknowledgment of diverse cultural beliefs, attitudes, behaviors, and group distinctiveness that require special, targeted strategies to enhance effectiveness. Diverse populations that may benefit from specialized approaches to overweight, obesity, and physical activity include rural/urban, racial/ethnic, age, gender, and disability status groups.
Away from home eating sites	Is a term from the Continuing Survey of Food Intake by Individuals and is divided into four groups: <i>Fast food</i> includes self-serve restaurants, carryout places, cafeterias, and meals on wheels; <i>Restaurants</i> are those with waiter/ waitress service; <i>Schools</i> include day-care centers and summer camps; <i>Other</i> includes vending machines, recreation, entertainment places, community feeding programs, and someone's home.
Motivational interviewing	A counseling technique that promotes active decision-making and personal responsibility for change. It is based on an assessment of readiness to change by determining importance of the change to the person and confidence in his/her ability to change. Motivational interviewing is a patient-centered, structured discussion about behavior change. (Tziraki, 1994).
Body mass index (BMI)	BMI is a measure which takes into account a person's weight and height to gauge total body fat.

Rationale:

- The prevalence of obesity among Wisconsin adults (defined as a body mass index $\geq 30 \text{ kg/m}^2$) increased from 12.7% in 1991 to 17.9% in 1998 (Mokdad, et al, 1999).
- In Wisconsin, the prevalence of overweight among children ages 2 to 5 years was 11.4% in 2000. The prevalence of overweight was highest among American Indian (20.9%), Asian (18.5%) and Hispanic (16.0%) children. The rates were lowest among White (10.1%) and Black (8.7%) children (Centers for Disease Control and Prevention, 2000).
- Medical costs and lost productivity attributable to obesity amounted to an estimated \$99 billion nationally in 1995 (U.S. Department of Health and Human Services, 2000).
- Obesity is associated with increased risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer (U.S. Department of Health and Human Service, 2000).
- Overweight and obesity acquired during childhood or adolescence may persist into adulthood and increase the risk for some chronic diseases later in life (U.S. Department of Health and Human Services, 2000).
- A child who is obese at age 6 has a 25% chance of being obese as an adult, and a child who is obese at age 12 has a 75% chance of being obese as an adult (Klish, 1998).
- As many as 80% of children and adolescents who are diagnosed with Type 2 diabetes may be overweight at the time of diagnosis (American Diabetes Association).

- As the U.S. population becomes increasingly overweight, researchers expect Type 2 diabetes to appear more frequently in younger, pre-pubescent children (American Diabetes Association).

Note: Both nutrition and physical activity are critical for preventing overweight and obesity, however the physical activity outcome objectives are addressed separately and the focus of this outcome objective is nutrition and diet related interventions and strategies.

Outcomes:

School-Based

Schools have the potential to make valuable contributions to both the prevention and treatment of childhood overweight. A comprehensive school health program model consists of eight interacting components: health instruction, health services, school environment, food service, school-site health promotion for faculty and staff, social support services, physical education classes, and integrated and linked family and community promotion efforts (Story, 1999).

Short-term Outcome Objectives (2002-2004)

- Increase the proportion of schools that promote the United States Department of Agriculture's *Dietary Guidelines for Americans* (U.S. Department of Agriculture, 2000) and *Food Guide Pyramid* (U.S. Department of Agriculture, 1996, U.S. Department of Agriculture, 2000) through policies that:
 - Decrease the percentage of schools with exclusive contracts with soda companies.
 - Promote the use of non-food items as prizes or rewards in the classroom and larger school environment, rather than using food as a reward.
 - Increase the proportion of children and adolescents whose intake of meals and snacks at school contributes proportionally to good overall dietary quality.
- Increase the proportion of schools that promote the United States Department of Agriculture's *Dietary Guidelines for Americans* and *Food Guide Pyramid* through education that:
 - Increases the percentage of schools that require incorporation of nutrition education into existing curriculum, to include direct teaching of nutrition information as well as indirect teaching, i.e. use of nutritious foods in examples across curricula.
 - Increases the percentage of colleges and universities that include nutrition education in the professional preparation of teachers.
 - Increases children's knowledge of the Food Guide Pyramid and Dietary Guidelines for Americans.
 - Increases the percentage of older children and adolescents with knowledge of the relationship between caloric intake and energy expenditure.

Medium-term Outcome Objective (2005-2007)

- Increase the percentage of children and adolescents who follow the Dietary Guidelines for Americans and the Food Guide Pyramid (National Association of State Boards of Education, 2000; U.S. Department of Agriculture, 2000; U.S. Department of Health and Human Services, 2000; Wisconsin Department of Public Instruction, 2000).

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Staff time to form statewide leadership/collaboration/partnerships.
- School administration time to review, revise and implement policy.

- School staff time to attend training(s) on Dietary Guidelines for Americans and Food Guide Pyramid.
- Key partners: parents and children; Parent Teacher Organizations (PTO); Department of Public Instruction; Department of Health and Family Services, Division of Public Health; Wisconsin Dietetic Association; Wisconsin School Food Service Association; school administration including foodservice management; Local health departments; Tribes; Wisconsin's Institutions of Higher Education; University of Wisconsin Extension, Cooperative Extension; food industry; and the Wisconsin Association of Health, Physical Education, Recreation, and Dance (WAHPERD).

Outputs: (*What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*)

- Formation of statewide leadership/collaboration/partnerships to develop and implement training(s), educational campaign, and grassroots organizing. Recommended partners include Division of Public Health and the Department of Public Instruction; Community and School Nutrition professionals.
- Training for teachers and administrative staff on the United States Department of Agriculture's *Dietary Guidelines for Americans* and the *Food Guide Pyramid*.
- Educational campaigns and/or meetings with school administrators, legislators, teachers, and community members to advocate for and inform regarding school policies that promote good overall dietary quality. Content will include emphasis on diversity competence in school policies and training.
- Grassroots community advocacy for policy change which includes parents, Parent Teacher Organizations/Parent Teacher Associations, school representatives, and teachers.
- Integration of the benefits of good overall dietary quality and basic nutrition information into the curriculum for the professional preparation of teachers.

Work Site and Senior Site Based

Short-term Outcome Objectives (2002-2004)

- Increase the proportion of worksites that promote the United States Department of Agriculture's *Dietary Guidelines for Americans* and *Food Guide Pyramid* through policy and programs:
 - Increase the percentage of worksites that offer nutrition and/or weight management programs or counseling (e.g., American Heart Association "One of a Kind," or "Heart at Work," CDC's "Personal Energy Plan – PEP").
 - Increase the percentage of worksites that offer food options on site that contribute to good overall dietary quality.
 - Increase incentives for worksites to provide health promotion benefits (e.g., tax credits, lower healthcare premiums).
- Increase the percentage of senior sites that offer education related to weight management counseling.

Medium-term Outcome Objective (2005-2007)

Increase the percentage of adults who follow the *Dietary Guidelines for Americans* and the *Food Guide Pyramid*.

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Staff time from partner agencies to form and operate a local coalition.

- Funding for local coalition to conduct outreach and education to worksites and senior sites to promote eating for health.
- Key Partners: Wisconsin adults; business associations; unions; state and local government; city councils and county boards; media and marketing representatives; health professional organizations; American Heart Association; American Cancer Society; senior centers; Department of Health and Family Services – Division of Supportive Living; community leaders; malls and shopping centers; hotels; Wisconsin Association of Health, Physical Education, Recreation, and Dance (WAHPERD).

Outputs: *(What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*

- Form local coalition.
- Conduct outreach and education to worksites about the benefits of promoting and supporting eating for health among employees:
 - cost-effectiveness.
 - “best practice” models from worksite.
- Conduct media campaign to promote healthy eating among working adults and older adults who are not working.
- Establish worksite wellness programs
 - based on input from employee survey.
 - content should include emphasis on diversity competence.

Environmental (Lin and Frazao, 1999; Lin and Guthrie, 1999; Lin, Guthrie and Blaylock, 1999).

Short-term Outcome Objectives (2002-2004)

- Explore options for providing incentives/subsidies to vendors to make and/or offer healthier food options.
- Increase the percentage of food environments away from home that offer a variety of fruits and vegetables.
- Increase the percentage of food environments away from home that offer low fat (1%) or fat free (skim) milk.
- Increase the percentage of food environments away from home that offer point of purchase nutritional information for foods served.
- Increase the availability of healthier food options at food pantries and programs i.e., SHARE.
- Increase access to and participation in programs that foster a healthy diet (e.g., Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); Farmers Markets; Community Gardens; Community Supported Agriculture; Food Stamp Nutrition Education Program; and, Expanded Food and Nutrition Education Program (FSNEP and EFNEP)).

Medium-term Outcome Objectives (2005-2007)

- Increase the availability of and access to healthier food options at food environments away from home.
- Increase the availability of and access to:
 - healthier foods from which to prepare meals at home.
 - opportunities to learn at-home food preparation skills.

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Local community based coalitions
- Funding for local staff
- Key partners: food industry; businesses associations; state and local government; health professional organizations; Local health departments; Tribes; Department of Health and Family Services, Division of Public Health; UW-Extension; Food Stamp Nutrition Education Program; Expanded Food and Nutrition Education Program; WIC; Wisconsin Grocers Association; Farmers Market managers; community garden managers; Wisconsin Association of Health, Physical Education, Recreation, and Dance (WAHPERD).

Outputs: (*What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*)

- Conduct focus groups regarding improving the food environment.
- Grassroots advocacy to promote policy and practice changes that effect the food environment.
- Promote programs that foster a healthy diet.

Health Care System

Health care providers have the opportunity to play a vital prevention role through routine assessment, counseling and anticipatory guidance (University of Minnesota website; Richards, 1996).

Short-term Outcome Objectives (2002-2004)

- Increase health care provider knowledge, awareness and skills for motivational interviewing.
- Increase the percentage of health care institutions with formalized referral linkages to nutrition professionals.
- Increase insurance coverage of counseling for nutrition and weight management.

Medium-term Outcome Objectives (2005-2007)

- Increase the proportion of physicians and other health care providers who counsel and refer on nutrition and weight management.
- Increase the proportion of physicians and other health care providers who utilize the *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults* (National Institutes of Health, 1998).
- Increase the proportion of physicians and other health care providers who utilize the *Obesity Evaluation and Treatment: Expert Committee Recommendations* for children and adolescents (Barlow and Dietz, 1998; University of California, 2000).

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Time to develop and implement training.
- Health care provider time to attend training.
- Healthcare institutions capacity to offer services – funding to hire staff or establishment of contracts for services.
- Volunteer and paid staff time of statewide taskforce leadership to organize advocacy efforts regarding insurance coverage.
- Key partners: healthcare providers; health professional organizations; Department of Health and Family Services, Division of Public Health; Department of Regulation and Licensing;

Insurance companies; Local health departments; Tribes; American Heart Association, American Lung Association; American Diabetes Association; American Cancer Society; University of Wisconsin; Wisconsin Institutions of Higher Education; medical schools; State Medical Society; physician and healthcare provider professional organizations; weight management programs; and Wisconsin Association of Health, Physical Education, Recreation and Dance (WAHPERD).

Outputs: *(What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.)*

- Training for health care providers on motivational interviewing.
- Integration of information on the benefits of preventing overweight/obesity and skills in motivational interviewing into the curriculum for health care professionals.
- Dissemination of information regarding overweight/obesity prevention to healthcare providers.
- Advocacy and policy development for insurance coverage.
- Health care institutions have identified referral source for nutrition and weight management counseling, either through hiring of staff or establishment of formal referral linkages.
- Increased availability of family-based behavior change programs for children who are overweight or at risk for overweight.
- Assure diversity competence in programs and policies.

Breastfeeding/Feeding Relationship

Short-term Outcome Objectives (2002-2004)

- Increase the percentage of women who initiate breastfeeding in the early post-partum period.
- Increase the number of hospitals that have adopted the Ten Steps to Successful Breastfeeding (U.S. Department of Health and Human Services, 2000).
- Increase the number of worksites that have policies that support breastfeeding employees.
- Increase the number of healthcare providers that receive training on the parent-child feeding relationship and the division of responsibility in feeding (Satter, 1999; Story, Holt and Sofka, 2000).

Medium-term Outcome Objectives (2005-2007)

- Increase the percentage of infants who are breastfed for 12 months or longer to 25%.
- Increase the percentage of new parents who receive information on the feeding relationship, feeding cues, and the division of responsibility in feeding.

Inputs: *(What we invest – staff, volunteers, time money, technology, equipment, etc.)*

- Staff time to attend training.
- Staff time to form coalitions or taskforces to promote breastfeeding.
- Funding for coalitions.
- Funding for media campaign.
- Hospital capacity to adopt breastfeeding policies and programs.
- Worksite capacity to adopt breastfeeding programs and policies.
- Capacity to monitor breastfeeding rates and trends.
- Key partners: healthcare professionals; local community members; parents; families; employers; childcare providers; legislature; hospitals; healthcare institutions; breastfeeding

support groups; Department of Health and Family Services, Division of Public Health; Local health departments; Tribes.

Outputs: *(What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*

- Integration of information on the benefits of breastfeeding and skills in breastfeeding counseling into the curriculum for health care professionals.
- Train healthcare professionals on the basics of lactation and breastfeeding counseling.
- Training for health care providers on the parent-child feeding relationship and division of responsibility in feeding (University of Washington, 1990).
- Make available to parents and healthcare professionals educational materials that include information on the feeding relationship, feeding cues and the division of responsibility in feeding.
- Form coalition or taskforce to:
 - promote and support breastfeeding as the norm for infant feeding.
 - promote appropriate infant and child feeding practices.
- Conduct media campaign to promote breastfeeding such as the Best Start Social Marketing campaign “Loving Support Makes Breastfeeding Work” (Best Start Social Marketing, 1997).
- Establish hospital and maternity center practices that have adapted the “Ten Steps to Successful Breastfeeding.” (U.S. Department of Health and Human Services, 2000).
- Establish worksite, family, and community programs/policies that enable breastfeeding continuation when women return to work.
- Monitor breastfeeding incidence and duration trends, including minority and ethnic groups

Evaluation and Measurement of Long-Term Objective:

Adolescent data for this objective is currently measured by the Center for Disease Control and Prevention’s (CDC) Youth Risk Behavior Surveillance System. Adult data for this objective is currently measured by the CDC’s Behavioral Risk Factor Surveillance System. Baseline data (2001 and 2000, respectively) will be compared to the most recent data available in 2010 to measure success toward this objective.

The only baseline data available for Wisconsin children is through the 2000 Pediatric Nutrition Surveillance System and is limited to Wisconsin children ≥ 2 years and less than 5 years old enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). This data shows that 11.4% of these children are overweight, with large disparities when analyzed by ethnicity. Trend data shows an increasing prevalence each year since 1994.

Weight and height surveillance is needed to track the general Wisconsin preschool population. In addition, there is currently no reporting of weight and height data for school-age children younger than high-school age in Wisconsin. Many schools collect this information, but a central reporting system is needed.

The need to improve surveillance of weight information among children must be balanced with the need to be both sensitive and accurate in the way that children are weighed and measured and in the way the data is used. The citations at the end of this document provide helpful references regarding the collection of weights and heights in children.

School Based

- The Youth Risk Behavior Survey currently measures intake of fruit, vegetables, dairy foods, and soda among high-school age youth in Wisconsin.
- Similar nutritional intake data is needed for children younger than high-school age. School Health Education Profile (SHEP) currently tracks nutrition-related policies and practices in schools.

Work Site and Senior Site Based

- The Behavior Risk Factor Survey currently measures intake of fruit and vegetables among adults in Wisconsin.
- Develop and implement a survey of worksites regarding policies and practices.
- Develop and implement a survey of senior sites/centers regarding policies and practices.

Environmental

- Work with community-based taskforces and/or local public health agencies to develop and administer a formal or informal survey assessing the food environment in the community.

Health Care System

- *To assess third party payer coverage:* develop and implement a survey of third party payers to measure coverage of nutrition and weight management counseling services/programs.
- *To assess health care institutions' services:* develop and implement a survey of health care institutions to measure the availability of nutrition professionals (on staff or through formal referral linkages).
- *To assess individual health care providers skills and practices:* recommend Bureau of Health Information survey of licensed health care providers include questions to measure
 - Knowledge, awareness, and skills in motivational interviewing.
 - Knowledge of the importance of the parent-child feeding relationship.
 - Counseling and referral practices regarding nutrition and weight management.
 - Use of guidelines.

Breastfeeding/Feeding Relationship

- The Ross Mother's Survey currently measures breastfeeding initiation and breastfeeding at 6 months. However a more reliable data source is needed and a measure of breastfeeding duration at 12 months is needed.
- Track the number of taskforces formed to promote breastfeeding.
- Include in an existing survey or develop and implement a survey of hospitals to assess practices related to breastfeeding.
- Include in an existing survey or develop and implement a survey of worksites to assess policies and practices supporting breastfeeding.
- Recommend the Bureau of Health Information survey of licensed health care providers include questions to survey health care providers for awareness of the concept of the parent-child feeding relationship and the division of responsibility and use of related materials with parents.

Crosswalk to Other Health and System Priorities in Healthiest Wisconsin 2010

Adequate and Appropriate Nutrition: Increase the proportion of health care providers who counsel and refer on nutrition and weight management. Increase the proportion of schools that promote the United States Department of Agriculture's *Dietary Guidelines for Americans* and *Food Guide Pyramid*

through policy and education. Increase the proportion of worksites (including Senior Centers) that promote the United States Department of Agriculture's *Dietary Guidelines for Americans* and *Food Guide Pyramid* through policy and programs. Increase the availability of and access to healthier food options at away from home eating sites (fast food, restaurants, and vending machines). Increase the percentage of infants who are breastfed for 12 months or longer to 25%.

Mental Health and Mental Disorders: Obesity is associated with increased risk for high blood pressure, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. According to Centers for Disease Control and Prevention Healthy Days Measures, some of these diseases are associated with high levels of reported unhealthy days. For example, a recent cross-sectional study of almost 10,000 adults found that adults with arthritis reported 4.6 more unhealthy days per month compared to adults without arthritis. Persons reporting having had a heart attack, coronary heart disease, or stroke reported an average of 10 unhealthy days for the prior month compared to 5 unhealthy days reported among persons not having had one of these conditions. Adults with diabetes reported experiencing 9.9 unhealthy days per month compared to 5.1 unhealthy days per month for adults without diabetes.

In addition, obesity is associated with an increased risk of psychological disorders such as depression and with psychological difficulties due to social stigmatization. In the U.S. Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, one of the visions for the future is that "the social stigmatism associated with overweight and obesity is eradicated."

Equitable, Adequate, and Stable Financing: Decrease the percentage of schools with exclusive contracts with soda companies.

Integrated Electronic Data and Information Systems: There is currently no reporting of weight and height data for school-age children younger than high-school age in Wisconsin. Many schools collect this information, but a central reporting system is needed.

Social and Economic Factors that Influence Health: Advocacy and policy development for insurance coverage of nutrition and/or weight management education and/or counseling.

Coordination of State and Local Public Health System Partnerships: Statewide task force of all key players and statewide coordination/networking of local initiatives.

Sufficient, Competent Workforce: Build local capacity for grassroots advocacy for policy change. Enhance health care provider knowledge and skills regarding nutrition and weight management counseling and referral, and basics of lactation, breastfeeding counseling. Increase availability and systems linkages to nutrition professionals from health care system. Enhance school capacity to build nutrition education into existing curriculum. Increase cultural competency and/or diversity of workforce.

Significant Linkages to Wisconsin's 12 Essential Public Health Services

Monitor health status to identify community health problems: Evaluation measures within this objective include efforts to monitor the health status of individuals in Wisconsin, such as indicators on the Behavioral Risk Factor Survey and the Youth Risk Behavior Surveillance System.

Educate the public about current and emerging health issues: This objective includes educational outcome objectives targeting school-age children, school staff and administrators, legislators, worksite managers, working adults and seniors, and health care providers.

Promote community partnerships to identify and solve health problems: Partnership strategies are used for promoting the Dietary Guidelines and Food Guide Pyramid; local coalitions are recommended for that goal and for achieving healthier food options away from home; and breastfeeding coalitions/task forces are recommended.

Create policies and plans that support individual and community health efforts: Outcome objectives include establishment of school policies addressing healthy nutrition, worksite policies for health promotion and breastfeeding, and health insurance policies that include nutritional services.

Link people to needed health services: By making nutrition information, programs and choices available in the school or worksite, it makes access to other health services easier.

Assure a diverse, adequate, and competent workforce to support the public health system: Includes training and practice standards for teachers and health care providers.

Evaluate effectiveness, accessibility, and quality of personal and population-based health services: The outcome objectives include a thorough evaluation of their impact.

Connection to the Three Overarching Goals of Healthiest Wisconsin 2010

Protect and promote health for all: Strategies that reach the entire population include school-based programming/policies; and improvement in the health care system in addressing nutritional risk factors/diet.

Eliminate health disparities: The assurance of diversity competence is central to both school system and health care system programs and policies recommended. In addition, ongoing monitoring of breastfeeding data by minority/ethnic group is recommended.

Transform Wisconsin's public health system: Transforms the system by giving pivotal roles to key partners such as worksites, schools, and health care providers.

Key Interventions and/or Strategies Planned:

The key interventions and strategies that will be used to promote a reduction of overweight for children and adolescents and obesity for adults fall into 5 categories: (1) school, (2) work site and senior site, (3) environmental, (4) health care system, and (5) breastfeeding/feeding relationship. Strategies include promoting the United States Department of Agriculture's Dietary Guidelines for Americans and the Food Guide Pyramid through policies and education in schools and in worksites and senior sites. These strategies will result in more children, adolescents, and adults following the recommendations for diet and physical activity as outlined in the Dietary Guidelines for Americans and the Food Guide Pyramid. Strategies are also aimed at increasing the availability and access to healthier food options when eating away from home, healthier foods from which to prepare foods at home, and opportunities to learn at-home food preparation skills. Food environment changes include greater availability of fruits and vegetables, low fat or fat free milk options, and point of purchase nutrition information.

The health care providers play a vital role in prevention and treatment of overweight and obesity through routine assessment, counseling, and anticipatory guidance. Because of this role, strategies are aimed at increasing the knowledge, awareness, and skills of health care providers in counseling patients to maintain or achieve a healthy weight. Health care providers need to have formalized referral linkages and seek insurance coverage for counseling regarding nutrition and weight management.

Promoting and supporting breastfeeding and educating new parents and families on the feeding relationship, feeding cues, and the division of responsibility in feeding are key strategies for preventing the rapid increase in the number of children who are overweight and lessen the risk for these children to become overweight adults. These outcomes will be achieved through training for healthcare providers, incorporating the Ten Steps to Successful Breastfeeding into hospital practices, promoting worksite lactation programs, and an educational campaign targeted to parents and healthcare professionals.

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